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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,697	01/05/2004	Peter C. Williams	22188/06559	1696
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CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114				
			EXAMINER NICHOLSON, ERIC K	
			ART UNIT 3679	PAPER NUMBER

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,697

Applicant(s)

WILLIAMS ET AL.

Examiner

Eric K Nicholson

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent 3,736,008 to Crawford. The Crawford coupling illustrates a tube gripping ferrule 3 for a tube fitting 1, the ferrule including an generally cylindrical interior wall as shown in fig. 3 through the center of the ferrule so that the ferrule can be installed over a tube end "T". An outer wall 31 axially tapers with a radially increasing dimension from a front portion of the ferrule to a back portion of the ferrule and the front portion of the ferrule indents and bites (fig. 4, 61, 62) into an outer surface of a tube end "T" when the fitting is assembled and pulled-up via nut 7 threaded onto the fitting 1. The interior wall comprising first 26 and second 36 cylindrical portions, the first 26 cylindrical portion being axially adjacent a front edge of the ferrule, and the second 36 cylindrical portion extending to a back edge of the ferrule. As is clearly shown in fig. 3 the second 36 cylindrical portion has a larger diameter than the first cylindrical portion. As to claim 2 as shown in fig. 3 the back edge of the ferrule is radially spaced from the tube end when the ferrule is assembled into and pulled-up in the fitting. As to claims 3 and 4, since no clear orientation of front or back has been clearly set forth the ferrule can be viewed as either a front

or back ferrule in a two ferrule tube fitting where the two ferrules 3 and 5 are shown in fig. 1. As to claim 5 the ferrule comprises metal as illustrated by the proper cross-hatchings for metal in the drawings.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 3,736,008 to Crawford in view of U.S. patent 5,934,714 to Sugiyama et al.. Crawford as noted above discloses the claimed device except for the particular structure of the ferrule being case hardened. Sugiyama et al. discloses that it is known in the prior art to provide a *similar* type coupling with the second ferrule 4 being case hardened via carburization (column 1, lines 45-67 continuing on to column 2, lines 1-3) in order to properly bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to

harden the ferrule of Crawford via carburization as taught in the prior art of Sugiyama, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the inserted tube. Further, as to claim 6, Crawford discloses the claimed invention however the ferrule is not stated to be made from stainless steel. Stainless steel is a well known material used in the pipe coupling art for its corrosion resistance. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the ferrule from stainless steel to aid in corrosion resistance of the pipe coupling assembly, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note ferrule 12 of Wolfram patent 2,437,632 and the ferrule 14 of Niemeyer patent 3,970,337 and ferrule 6 of Daniel patent 3,787,080 all of which illustrate a ferrule having a larger diameter second cylindrical inner surface than a first cylindrical inner surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Nicholson whose telephone number is (703) 308-0829. The examiner can normally be reached on Tuesdays thru Fridays from 7:30 to 6:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone number for Technology Center 3600 is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-1113.

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4/3/04
W@H


Eric K. Nicholson
Primary Examiner
Technology Center 3600